CLAIMS

1. A power plant for generating electric power by means of fuel cells, **characterized in that** the installed peak power of the power plant is more than two times higher than the average generated power.

2. A power plant according to claim 1, wherein the power plant comprises more than ten, preferably more than a hundred, fuel cell stacks.

3. A power plant according to claim 1 or 2, which is coupled to an electrochemical production process in which hydrogen is released, and which is arranged for generating electric power, using at least part of said hydrogen, and supplying at least part of the generated electric power to the electrochemical production process.

4. A power plant according to claim 3, wherein the fuel cell stacks are connected in strings, and wherein the voltage of said strings at least substantially corresponds to the DC voltage that is required in the electrochemical process.

5. A power plant according to any one of the claims 2-4, wherein the installation time of the fuel cells in the power plant at least substantially corresponds to the life span of the fuel cell stacks.

6. A power plant according to any one of the preceding claims, wherein at least some of the installed fuel cells are exchangeable without switching off other installed fuel cells.

7. A method for generating electric power, using the power plant according to any one of the preceding claims, wherein at least part of the generated power is supplied to an electrochemical process in which hydrogen is released, and wherein at least part of said hydrogen is utilised by the power plant for generating electric power.

8. A method according to claim 7, wherein the DC voltage supplied by the power plant is increased by adding series-connected fuel cell stacks, such that the current in

the electrochemical process is maintained at an at least substantially constant level.

9. A method according to claim 7, wherein the current in the electrochemical process, and thus the production, is maintained at an at least substantially constant level through the addition of parallel-connected fuel cell stacks.